ABSTRACT

An improved throat 2 for transmitting acoustic energy from a source driver unit 7 to a feeder section 3 of a directivity controlling acoustic horn is disclosed. The throat 2 comprises: a circular throat entrance 2i connectable to the source driver unit 7; a rectangular throat exit 2e connectable to or integral with the feeder section 3; and a circular cross-section to rectangular cross-section transition portion 2a extending between the throat entrance 2i and the throat exit 2e. The throat 2 is shaped such that its profiles initially diverge from an axis longitudinal to the throat 14 at the same angle in a direction from the throat entrance 2i towards the throat exit 2e. Such a throat, when fitted in an appropriate acoustic horn with a source driver unit having a taper matching the aforesaid profile angles, provides a smooth transition for sound waves propagating out from the source driver unit into the horn.